

Linda Snyder  
Ken-Koat, Inc.  
PO Box 1027  
Huntington, Indiana 46750

Re: **069-12991**  
Second Administrative Amendment to  
**Part 70 T 069-7676-00018**

Dear Ms. Snyder:

Ken-Koat, Inc. was issued a Part 70 permit on July 9, 1999 for a metal coating operation. A first Administrative Amendment (069-13557-00018) was issued on December 13, 2000. A letter requesting a change was received on October 25, 2000. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

The source is requesting approval to operate the following new emission units and pollution control devices (the thermal oxidizer is an existing, permitted control device):

- (a) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
  - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
  - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
  - (3) One (1) electric heater.

The source is increasing the capacity at the one (1) dip conveyor designated as DC-2 as follows:

- (b) One (1) dip conveyor designated as DC-2, with emissions controlled by a thermal oxidizer, CE-3, with the following equipment:
  - (1) One (1) coating tank with a maximum topcoat application rate of ~~11.73~~ **12.00** pounds per hour, which exhausts to a stack designated as C3.
  - (2) One (1) primer tank with a maximum primer application rate of ~~5.32~~ **8.20** pounds per hour, which exhausts to one (1) stack designated as C3.
  - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million British thermal units per hour, which exhausts to one (1) stack designated as C3.

The source never installed the one (1) dip and spin, identified as DS-2, the one (1) dip conveyor, identified as DC-3, and the one (1) dip conveyor, identified as DC-4, which will be removed from the permit. One (1) HVLP chain on edge machines, designated as COE-2, has been removed from this source and will be removed from the permit.

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) dip and spin for metal inserts, designated as DS-1, with a maximum adhesive application rate of 5.68 pounds per hour, which exhausts to one (1) stack designated as S-18.
- ~~(b) One (1) dip and spin designated as DS-2, with emissions controlled by thermal oxidizer, GE-3, with the following equipment:~~
  - ~~(1) One (1) coating tank with a maximum topcoat application rate of 17.97 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - ~~(2) One (1) primer tank with a maximum primer application rate of 4.10 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - ~~(3) One (1) electric heater, which exhausts to one (1) stack designated as C3.~~
- ~~(e)~~ **(b)** One (1) dip conveyor designated as DC-1, with a maximum application rate of 34.93 pounds per hour, which utilizes one (1) dryer, and is controlled by thermal oxidizer, CE-3, which exhausts to one (1) stack designated as C3.
- ~~(d)~~ **(c)** One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
  - (1) One (1) coating tank with a maximum topcoat application rate of ~~44.73~~ **12.00** pounds per hour, which exhausts to a stack designated as C3.
  - (2) One (1) primer tank with a maximum primer application rate of ~~5.32~~ **8.20** pounds per hour, which exhausts to one (1) stack designated as C3.
  - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- ~~(e) One (1) dip conveyor designated as DC-3, with emissions controlled by thermal oxidizer, GE-3, with the following equipment:~~
  - ~~(1) One (1) coating tank with a maximum topcoat application rate of 19.06 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - ~~(2) One (1) primer tank with a maximum primer application rate of 4.29 pounds per hour, which exhausts to one (1) stack designated as C3.~~

- ~~(3) — One (1) natural gas drying oven designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.~~
- ~~(f) — One (1) dip conveyor designated as DG-4, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
  - ~~(1) — One (1) coating tank with a maximum topcoat application rate of 17.60 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - ~~(2) — One (1) primer tank with a maximum primer application rate of 3.96 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - ~~(3) — One (1) natural gas drying oven, designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.~~
- ~~(g)~~ **(d)** One (1) ransburg coating process, designated as RCP, controlled by the thermal oxidizer, CE-3, with a maximum metal insert rate of 1000 pounds per hour with the following equipment:
  - (1) Two (2) electrostatic paint booths, designated as EPB-1 and EPB-2 respectively, each with a maximum application rate of 11.42 pounds per hour, each exhausting to ~~one (1) stack designated as S-15~~ **the thermal oxidizer (CE-3) and stack C3.**
  - (2) One (1) natural gas fired oven, designated as OVEN-3, which exhausts to one (1) stack, designated as C4.
- ~~(h)~~ **(e)** ~~Four (4)~~ **Three (3)** HVLP chain on edge machines, designated as COE-1, ~~COE-2~~, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, ~~2.2 pounds per hour~~, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. ~~COE-2 exhausts to one (1) stack designated as S-6.~~ COE-3 **and exhausts to three (3) stacks designated as S-3, S-4 and S-5,** and COE-4 exhausts to ~~three (3) stacks S-22, S-23 and S-24,~~ each utilizing the thermal oxidizer, CE-3, to control VOC emissions, **and stack C3.**
- ~~(i)~~ **(f)** One (1) open top degreaser, identified as DG, with a maximum trichloroethylene consumption rate of 12 gallons per day which exhausts internally.
- ~~(j)~~ **(g)** Three (3) steel grit blasters, designated as SGB-1, SGB-2, and SGB-3, each with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-1, exhausting to one (1) stack designated as #C1.
- ~~(k)~~ **(h)** One (1) aluminum oxide grit blaster, identified as ALOX-1, with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-2 and exhausting to a stack designated as #C2.

- (i) Four (4) HVLP chain on edge machines, designated as COE-1, COE-2, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, 2.2 pounds per hour, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. COE-2 exhausts to one (1) stack designated as S-6. COE-3 exhausts to three (3) stacks designated as S-3, S-4 and S-5, and COE-4 exhausts to three (3) stacks S-22, S-23 and S-24, each utilizing the thermal oxidizer, CE-3, to control VOC emissions.
- ~~(m)~~ (j) One (1) HVLP chain on edge machine, designated as COE-5, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
- (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour, which exhausts to one (1) stack designated as C3.
  - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour, which exhausts to one (1) stack designated as C3.
  - (3) One (1) electric heater which exhausts to one (1) stack designated as C3.
- (k) **One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:**
- (1) **Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;**
  - (2) **One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and**
  - (3) **One (1) electric heater.**

**SECTION D.1**

**FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]:**

- (a) ~~One (1) dip and spin designated as DS-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
  - (1) ~~One (1) coating tank with a maximum topcoat application rate of 17.97 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - (2) ~~One (1) primer tank with a maximum primer application rate of 4.10 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - (3) ~~One (1) electric heater, which exhausts to one (1) stack designated as C3.~~
- (b) (c) One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
  - (1) One (1) coating tank with a maximum topcoat application rate of ~~44.73~~ **12.00** pounds per hour, which exhausts to a stack designated as C3.
  - (2) One (1) primer tank with a maximum primer application rate of ~~5.32~~ **8.20** pounds per hour, which exhausts to one (1) stack designated as C3.
  - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- (e) ~~One (1) dip conveyor designated as DC-3, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
  - (1) ~~One (1) coating tank with a maximum topcoat application rate of 19.06 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - (2) ~~One (1) primer tank with a maximum primer application rate of 4.29 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - (3) ~~One (1) natural gas drying oven designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.~~
- (d) ~~One (1) dip conveyor designated as DC-4, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
  - (1) ~~One (1) coating tank with a maximum topcoat application rate of 17.60 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - (2) ~~One (1) primer tank with a maximum primer application rate of 3.96 pounds per hour, which exhausts to one (1) stack designated as C3.~~
  - (3) ~~One (1) natural gas drying oven, designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.~~
- (e)(a)(3) One (1) natural gas fired thermal oxidizer designated as CE-3, with a maximum heat input capacity of 6.00 million Btu per hour, with a minimum oxidizing zone temperature of 1400F.

**(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain an overall VOC control efficiency of 92.2% **for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility.** This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating **in pounds** per gallon of solids delivered to ~~any of the facilities listed above in Section D.1 (DC-2, DC-3, DC-4, and DS-2)~~, the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) and COE-5 listed in Section D.5 shall be limited to **85.5** ~~67.8~~. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2 (a)(2).

D.1.2 New Source Toxics Control [326 IAC 2-1-3.4]

The allowable HAP emissions shall be based on the Maximum Achievable Control Technology (MACT) analysis determined by the Office of Air **Quality Management**. The MACT ~~for the facilities listed above in section D.1 (DC-2, DC-3, DC-4, and DS-2)~~, shall be the use of the thermal oxidizer, CE-3, as described in Condition D.1.1(b), in combination with the application method of dip coating. The overall efficiency of this control device shall be 92.2%.

D.1.3 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

Any change or modification which may increase the VOC PTE of DC-2, ~~DC-3, DC-4, DS-2~~, CE-3 and COE-5 (listed in Section D.5) to greater than 249 tons per year, shall require prior approval from the Office of Air **Quality Management** before such change may occur.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for DC-2, ~~DC-3, DC-4, and DS-2~~ and any control devices (CE-3).

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) ~~Testing of this facility is specifically required by this permit and pursuant to CP No. 069-9246-00018, issued on September 25, 1998. Compliance with the control efficiency and minimum operating temperature specified in Condition D.1.1(b) shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~
- (b) ~~Pursuant to CP No. 069-9246-00018, issued on September 25, 1998, during the period within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, a performance test shall be required to demonstrate that the source is complying with 326 IAC 8-2-9.~~
- (1) ~~If the oxidizer is determined to demonstrate compliance, the required temperature and control efficiency shall be specified.~~

- ~~(2) If the oxidizer is determined to not demonstrate compliance, the efficiency needed to comply with 326 IAC 8-2-9 shall be determined by the performance test.~~
- ~~(3) The source shall be required to comply with the required control efficiency as determined by the performance test.~~
- ~~(c) This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.~~

**During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.**

#### D.1.7 Recuperative Thermal Oxidizer Operations

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.1.1 and D.1.2, when DC-2, ~~DC-3, DC-4, and DS-2~~ **is** in operation.
- (b) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with the limit in Condition D.1.2.
  - (1) This device shall have an accuracy of  $\pm 2.0^{\circ}\text{C}$  or  $\pm 0.75$  percent of the temperature range measured in degrees Celsius, whichever is greater.
- (c) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from ~~OAM~~ **OAQ** before such change may occur

The following section has been added to the permit:

## SECTION D.6

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (k) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
- (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
  - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
  - (3) One (1) electric heater.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water, when using air dried or forced warm air dried coatings at temperatures up to ninety degrees Celsius (90EC), and extreme performance coatings designed for exposure to temperatures consistently above ninety-five degrees Celsius (95EC).
- (b) The thermal oxidizer shall be in operation at all times and maintain an overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating shall not exceed 85.5 ~~44.8~~ pounds per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

#### D.6.2 New Source Toxics Control [326 IAC 2-4.1-1]

The use of the thermal oxidizer, CE-3, as described in Condition D.6.1(b), shall limit the potential to emit each individual HAP to less than ten (10) tons per year and the total HAPs to less than twenty-five (25) tons per year. Therefore, this facility is a minor source of HAPs, and the requirements of 326 IAC 2-4.1-1 are not applicable.



**D.6.3 Particulate Matter (PM) [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2, the PM from the one (1) chain on edge machine (COE-6) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control devices.

**Compliance Determination Requirements**

**D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.6.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

**D.6.6 Volatile Organic Compounds (VOC)**

Compliance with the VOC content limitation contained in Condition D.6.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

**D.6.7 Volatile Organic Compounds (VOC)**

Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition D.6.1. This volume weighted average shall be determined by the following equation:

$$A = [ 3 (C \times U) / 3 U ]$$

Where: A is the volume weighted average in pounds VOC per gallon  
C is the VOC content of the coating in pounds VOC per gallon  
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

**D.6.8 Recuperative Thermal Oxidizer**

- (a) The thermal oxidizer shall operate at all times that the process is in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1400EF during operation until a temperature and fan amperage has been determined from the most recent compliant stack test, as approved by IDEM. The temperature correlates to an overall VOC control efficiency of 92.2%. Once a temperature and duct pressure or fan amperage are determined during a compliance stack test, the operating temperature shall be greater than or equal to that temperature and the duct pressure or fan amperage shall be within a range established by the compliance stack test.

- (b) When operating the thermal oxidizer to achieve compliance with 326 IAC 8-2-9, 3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water, the thermal oxidizer shall maintain a minimum overall control efficiency of 92.2%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2 (a)(2).

#### **D.6.9 Particulate Matter (PM)**

The dry filters for PM control shall be in operation and control emissions from the chain on edge machine (COE-6) at all times when the chain on edge machine is in operation.

#### **Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]**

#### **D.6.10 Monitoring**

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (C3) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### **D.6.11 Parametric Monitoring**

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the recuperative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be maintained at a minimum of 1400EF during operation until a temperature has been determined from the most recent compliance stack test, as approved by IDEM, OAQ. Once a temperature has been determined from the most recent compliance stack test, the temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test.
- (b) After the first compliance stack test, the duct pressure or fan amperage shall be observed at least once per week when the thermal oxidizer is in operation. This pressure or amperage shall be maintained within a range established in the most recent compliance stack test.
- (c) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the reading is outside the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

**Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.6.12 Record Keeping Requirements**

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- (a) **To document compliance with Condition D.6.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.6.1.**
  - (1) **The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;**
  - (2) **A log of the dates of use;**
  - (3) **The cleanup solvent usage for each month;**
  - (4) **The total VOC usage for each month;**
  - (5) **The weight of VOCs emitted for each compliance period;**
  - (6) **The continuous temperature records for the thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test; and**
  - (7) **After the first compliance stack test, weekly records of the duct pressure or fan amperage.**
- (b) **To document compliance with Conditions D.6.3 and D.6.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.**
- (c) **All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

For consistency, Conditions D.2.11(a)(3) and D.5.10(a) (3) have been revised as follows:

- (3) **The daily volume weighted VOC content of the coatings as applied on days when a coating with a VOC content greater than 85.5 pounds of VOC per gallon of solids is used;**

And

- (3) **The ~~monthly~~ daily volume weighted VOC content of the coatings as applied on days when a coating with a VOC content greater than 85.5 pounds of VOC per gallon of solids is used;**

Other changes to Sections D.2 and D.5 are as follows:

**D.2.2 PSD Modification [326 IAC 2-2] [40 CFR 52.21]**

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The VOC input of the above listed facilities in Section D.2 (DC-1, DS-1, RCP, SB-1 - SB-4 and **COE-1, COE-3 and COE-4** ~~COE-1 - COE-4~~), and Section D.4 (DG) shall be limited to less than 250 tons per twelve (12) consecutive month period. This production limitation is equivalent to a VOC potential to emit of less than 250 tons per twelve (12) consecutive month period, therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

#### D.2.3 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the four (4) HVLP spray booths, the ~~four (4)~~ **three (3)** chain on edge machines and the ransburg coating process shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.2.8 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the four (4) HVLP spray booths (SB-1 - SB-4), the ~~four (4)~~ **three (3)** chain on edge machines (COE-1, **COE-3 and COE-4**) and the ransburg coating process (RCP) are in operation.

#### D.2.10 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (S-1, S-2, S-3, ~~S-4, S-5, S-6, S-10, S-11, S-12, S-13, S-14, and C3 S-22, S-23, and S-24~~) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.

- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain a minimum overall VOC control efficiency of 92.2% **for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility.** This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2).

Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating **in pounds** per gallon of solids delivered to any of the facilities listed above in Section D.2 (DC-1, RCP, COE-3 and COE-4) and the facilities listed in Section D.1 (DC-2, ~~DC-3, DC-4, and DS-2~~) and COE-5 listed in Section D.5 shall be limited to **85.5** ~~67.8~~. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (d) The input of VOC to DC-1, RCP, COE-3, and COE-4 and the usage of cleanup solvent for DC-1, RCP, COE-3, and COE-4 (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent) shall be limited to 2564 tons used per twelve (12) consecutive months period. This limitation will prevent the VOC emissions from DC-1, RCP, COE-3, and COE-4 from being greater than 200 tons per twelve (12) consecutive month period. This limitation is based upon the use of a control device with an overall control efficiency of 92.2%.
- (e) The input of VOC including cleanup solvent, minus the VOC solvent shipped out delivered to the applicators of SB-1, SB-2, SB-3 and SB-4 shall each be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-2-9 will not apply.
- (f) The input VOC of COE-1, ~~COE-2~~ and DS-1 shall each be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-2-9 will not apply.

#### D.5.3 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.

- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain a minimum overall VOC control efficiency of 92.2% **for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility.** This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating **in pounds** per gallon of solids delivered to the facilities listed above in Section D.5 (COE-5), the following facilities listed in Section D.1 (DC-2, ~~DC-3, DC-4, and DS-2~~), and the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) shall be limited to **85.5** ~~67-8~~. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

**D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]**

~~During the period within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, a performance test shall be required to demonstrate that the source is complying with 326 IAC 8-2-9. This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance. During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.~~

**D.5.7 Testing Requirements [326 IAC 2-7-6(1),(6)]**

- ~~(a) Testing of this facility is specifically required by this permit and pursuant to CP No. 069-9246-00018, issued on September 25, 1998. Compliance with the control efficiency and minimum operating temperature specified in Condition D.5.3(b) shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~
- ~~(b) Pursuant to CP No. 069-9246-00018, issued on September 25, 1998, during the period within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, a performance test shall be required to demonstrate that the source is complying with 326 IAC 8-2-9.~~
- ~~(1) If the oxidizer is determined to demonstrate compliance, the required temperature and control efficiency shall be specified.~~
- ~~(2) If the oxidizer is determined to not demonstrate compliance, the efficiency needed to comply with 326 IAC 8-2-9 shall be determined by the performance test.~~
- ~~(3) The source shall be required to comply with the required control efficiency as determined by the performance test.~~
- ~~(c) This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.~~

**During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.5.3, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.**

D.5.5 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

Any change or modification which may increase the VOC PTE of COE-5 and DC-2, ~~DC-3~~, ~~DC-4~~, ~~DS-2~~, CE-3 (listed in Section D.1) to greater than 249 tons per year, shall require prior approval from the Office of Air Quality before such change may occur.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact CarrieAnn Ortolani, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395). As of January 1, 2001, the name of the Office of Air Management (OAM) has been changed to the Office of Air Quality (OAQ).

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments

CAO/MES

cc: File - Huntington County  
U.S. EPA - Region V  
Huntington County Health Department  
Air Compliance Section Inspector - Ryan Hillman  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

## **PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY\***

**Ken-Koat, Inc.  
1605 Riverfork Drive East  
Huntington, Indiana 46750**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 069-7676-00018	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: July 9, 1999

First Administrative Amendment 069-13557-00018, issued on December 13, 2000  
First Significant Source Modification 069-12898-00018

Second Administrative Amendment No.: 069-12991-00018	Pages affected: 3, 5, 6, 7, 8, 33, 34 and 35; 52a, 52b, 52c and 52d are added
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality*	Issuance Date: May 10, 2001

\*As of January 1, 2001, the name of the Office of Air Management (OAM) has been changed to the Office of Air Quality (OAQ). All references to Office of Air Management (OAM) should be read as Office of Air Quality (OAQ).



**Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

- C.10 Compliance Schedule [326 IAC 2-7-6(3)]
- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.13 Monitoring Methods [326 IAC 3]

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
- C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

**Stratospheric Ozone Protection**

- C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

**D.1 FACILITY OPERATION CONDITIONS: - “New Equipment”: DC-2 and CE-3**

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.1.2 New Source Toxics Control [326 IAC 2-1.3-4]
- D.1.3 PSD Modification [326 IAC 2-2][40 CFR 52.21]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.1.6 Volatile Organic Compounds (VOC)

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.1.7 Recuperative Thermal Oxidizer Operations

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.1.8 Record Keeping Requirements
- D.1.9 Reporting Requirements

**D.2 FACILITY OPERATION CONDITIONS: “Existing Equipment”: DC-1, DS-1, RCP, Four (4) HVLP spray booths, SB-1 - SB-4, Three (3) Chain on edge machines, COE-1, COE-3 & COE-4 41**

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.2.2 PSD Minor Limit [326 IAC 2-2][40 CFR 52.21]
- D.2.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.5.3 Volatile Organic Compound (VOC) [326 IAC 8-2-9]
- D.5.4 New Source Toxics Control [326 IAC 2-1-3.4]
- D.5.5 PSD Modification [326 IAC 2-2] [40 CFR 52.21]
- D.5.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.5.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.5.8 Volatile Organic Compounds

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.5.9 Recuperative Thermal Oxidizer Operations

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.5.10 Record Keeping Requirements
- D.5.11 Reporting Requirements

**D.6 FACILITY OPERATION CONDITIONS: One (1) chain on edge machine (COE-6)**

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.6.2 New Source Toxics Control [326 IAC 2-1.3-4]
- D.6.3 Particulate Matter (PM) [326 IAC 6-3-2]
- D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.6.6 Volatile Organic Compounds (VOC)

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.6.7 Recuperative Thermal Oxidizer Operations

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.6.8 Record Keeping Requirements

**Certification**

**Emergency/Deviation Occurrence Report**

Quarterly Report, DS-1

Quarterly Report, COE-1

Quarterly Report, COE-2 (no longer needed)

Quarterly Report, SB-1

Quarterly Report, SB-2

Quarterly Report, SB-3

Quarterly Report, SB-4

Quarterly Report, "Existing Equipment"

Quarterly Compliance Monitoring Report

Semi-Annual Compliance Monitoring Report (for DG)

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates stationary metal coating operation.

Responsible Official:	Chris Robertson
Source Address:	1605 Riverfork Drive, Huntington, Indiana 46750
Mailing Address:	PO Box 1027, Huntington, Indiana 46750
SIC Code:	3479
County Location:	Huntington
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major, under PSD Rules; Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) dip and spin for metal inserts, designated as DS-1, with a maximum adhesive application rate of 5.68 pounds per hour, which exhausts to one (1) stack designated as S-18.
- (b) One (1) dip conveyor designated as DC-1, with a maximum application rate of 34.93 pounds per hour, which utilizes one (1) dryer, and is controlled by thermal oxidizer, CE-3, which exhausts to one (1) stack designated as C3.
- (c) One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
  - (1) One (1) coating tank with a maximum topcoat application rate of 12.00 pounds per hour, which exhausts to a stack designated as C3.
  - (2) One (1) primer tank with a maximum primer application rate of 8.20 pounds per hour, which exhausts to one (1) stack designated as C3.
  - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3..
- (d) One (1) ransburg coating process, designated as RCP, controlled by the thermal oxidizer, CE-3, with a maximum metal insert rate of 1000 pounds per hour with the following equipment:
  - (1) Two (2) electrostatic paint booths, designated as EPB-1 and EPB-2 respectively, each with a maximum application rate of 11.42 pounds per hour, each exhausting to the thermal oxidizer (CE-3) and stack C3.

- (2) One (1) natural gas fired oven, designated as OVEN-3, which exhausts to one (1) stack, designated as C4.
- (e) Four (4) HVLP spray booths for painting metal inserts, designated as SB-1, SB-2, SB-3 and SB-4, with a maximum adhesive application rate of 5.94 pounds per hour, 11.91 pounds per hour, 4.92 pounds per hour and 4.38 pounds per hour, respectively. All are equipped with dry filters for particulate matter control. SB-1 exhausts to one (1) stack designated as S-10, SB-2 exhausts to one (1) stack designated as S-11, SB-3 exhausts to one (1) stack designated as S-1, and SB-4 exhausts to one (1) stack designated as S-2.
- (f) One (1) open top degreaser, identified as DG, with a maximum trichloroethylene consumption rate of 12 gallons per day which exhausts internally.
- (g) Three (3) steel grit blasters, designated as SGB-1, SGB-2, and SGB-3, each with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-1, exhausting to one (1) stack designated as #C1.
- (h) One (1) aluminum oxide grit blaster, identified as ALOX-1, with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-2 and exhausting to a stack designated as #C2.
- (i) Three (3) HVLP chain on edge machines, designated as COE-1, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. COE-3 and COE-4 exhaust to the thermal oxidizer, CE-3, to control VOC emissions, and stack C3.
- (j) One (1) HVLP chain on edge machine, designated as COE-5, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
  - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour, which exhausts to one (1) stack designated as C3.
  - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour, which exhausts to one (1) stack designated as C3.
  - (3) One (1) electric heater which exhausts to one (1) stack designated as C3.
- (k) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
  - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
  - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
  - (3) One (1) electric heater.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
  - (1) One (1) natural gas boiler with a maximum heat input capacity of 5.23 million Btu per hour.
  - (2) One (1) burn-off oven, designated as BURN, maximum heat input capacity of 1 million Btu per hour, ventilated to an afterburner with 90% control efficiency, which exhausts to one (1) stack designated as C4.
  - (3) One (1) natural gas fired thermal oxidizer designated as CE-3, with a maximum heat input capacity of 6.00 million Btu per hour, with a minimum oxidizing zone temperature of 1400F.
- (b) Infrared cure equipment.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (c) One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
  - (1) One (1) coating tank with a maximum topcoat application rate of 12.00 pounds per hour, which exhausts to a stack designated as C3.
  - (2) One (1) primer tank with a maximum primer application rate of 8.20 pounds per hour, which exhausts to one (1) stack designated as C3.
  - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- (a)(3) One (1) natural gas fired thermal oxidizer designated as CE-3, with a maximum heat input capacity of 6.00 million Btu per hour, with a minimum oxidizing zone temperature of 1400F.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

### **D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]**

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain an overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating in pounds per gallon of solids delivered to DC-2, the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) and COE-5 listed in Section D.5 shall be limited to 85.5. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

### **D.1.2 New Source Toxics Control [326 IAC 2-1-3.4]**

The allowable HAP emissions shall be based on the Maximum Achievable Control Technology (MACT) analysis determined by the Office of Air Quality. The MACT for DC-2, shall be the use of the thermal oxidizer, CE-3, as described in Condition D.1.1(b), in combination with the application method of dip coating. The overall efficiency of this control device shall be 92.2%.

### **D.1.3 PSD Modification [326 IAC 2-2] [40 CFR 52.21]**

Any change or modification which may increase the VOC PTE of DC-2, CE-3 and COE-5 (listed in Section D.5) to greater than 249 tons per year, shall require prior approval from the Office of Air Quality before such change may occur.

### **D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for DC-2 and any control devices (CE-3).

## **Compliance Determination Requirements**

### **D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]**

During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

#### **D.1.6 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

##### **D.1.7 Recuperative Thermal Oxidizer Operations**

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.1.1 and D.1.2, when DC-2 is in operation.
- (b) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with the limit in Condition D.1.2.
  - (1) This device shall have an accuracy of  $\pm 2.0^{\circ}\text{C}$  or  $\pm 0.75$  percent of the temperature range measured in degrees Celsius, whichever is greater.
- (c) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from OAQ before such change may occur.

#### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

##### **D.1.8 Record Keeping Requirements**

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and the VOC and HAPs emission limits established in Conditions D.1.1 and D.1.2.



## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (b) One (1) dip conveyor designated as DC-1, with a maximum application rate of 34.93 pounds per hour, which utilizes one (1) dryer, and is controlled by thermal oxidizer, CE-3, which exhausts to one (1) stack designated as C3.
- (c) One (1) dip and spin for metal inserts, designated as DS-1, with a maximum adhesive application rate of 5.68 pounds per hour, which exhausts to one (1) stack designated as S-18.
- (d) One (1) ransburg coating process, designated as RCP, controlled by the thermal oxidizer, CE-3, with a maximum metal insert rate of 1000 pounds per hour with the following equipment:
  - (1) Two (2) electrostatic paint booths, designated as EPB-1 and EPB-2 respectively, each with a maximum application rate of 11.42 pounds per hour, each exhausting to the thermal oxidizer (CE-3) and stack C3.
  - (2) One (1) natural gas fired oven, designated as OVEN-3, which exhausts to one (1) stack, designated as C4.
- (e) Four (4) HVLP spray booths for painting metal inserts, designated as SB-1, SB-2, SB-3 and SB-4, with a maximum adhesive application rate of 5.94 pounds per hour, 11.91 pounds per hour, 4.92 pounds per hour and 4.38 pounds per hour, respectively. All are equipped with dry filters for particulate matter control. SB-1 exhausts to one (1) stack designated as S-10, SB-2 exhausts to one (1) stack designated as S-11, SB-3 exhausts to one (1) stack designated as S-1, and SB-4 exhausts to one (1) stack designated as S-2.
- (i) Three (3) HVLP chain on edge machines, designated as COE-1, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. COE-3 and COE-4 exhaust to the thermal oxidizer, CE-3, to control VOC emissions, and stack C3.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain a minimum overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2).

Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating in pounds per gallon of solids delivered to any of the facilities listed above in Section D.2 (DC-1, RCP, COE-3 and COE-4) and the facilities listed in Section D.1 (DC-2) and COE-5 listed in Section D.5 shall be limited to 85.5. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (d) The input of VOC to DC-1, RCP, COE-3, and COE-4 and the usage of cleanup solvent for DC-1, RCP, COE-3, and COE-4 (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent) shall be limited to 2564 tons used per twelve (12) consecutive months period. This limitation will prevent the VOC emissions from DC-1, RCP, COE-3, and COE-4 from being greater than 200 tons per twelve (12) consecutive month period. This limitation is based upon the use of a control device with an overall control efficiency of 92.2%.
- (e) The input of VOC including cleanup solvent, minus the VOC solvent shipped out delivered to the applicators of SB-1, SB-2, SB-3 and SB-4 shall each be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-2-9 will not apply.
- (f) The input VOC of COE-1, ~~COE-2~~ and DS-1 shall each be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-2-9 will not apply.

#### D.2.2 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

The VOC input of the above listed facilities in Section D.2 (DC-1, DS-1, RCP, SB-1 - SB-4 and COE-1, COE-3 and COE-4), and Section D.4 (DG) shall be limited to less than 250 tons per twelve (12) consecutive month period. This production limitation is equivalent to a VOC potential to emit of less than 250 tons per twelve (12) consecutive month period, therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

#### D.2.3 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the four (4) HVLP spray booths, the three (3) chain on edge machines and the ransburg coating process shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for DC-1, SB-1 - SB-4, RCP, COE-3 and COE-4 and any control devices.

## **Compliance Determination Requirements**

### **D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]**

During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

### **D.2.6 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

### **D.2.7 VOC Emissions**

Compliance with Conditions D.2.1 and D.2.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

### **D.2.8 Particulate Matter (PM)**

The dry filters for PM control shall be in operation at all times when the four (4) HVLP spray booths (SB-1 - SB-4), the three (3) chain on edge machines (COE-1, COE-3 and COE-4) and the ransburg coating process (RCP) are in operation.

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.2.9 Recuperative Thermal Oxidizer Operations**

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Condition D.2.1, when DC-1, RCP, COE-3 and COE-4 are in operation.
- (b) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with the limit in Condition D.1.2.
  - (1) This device shall have an accuracy of  $\pm 2.5^{\circ}\text{C}$  or  $\pm 0.75$  percent of the temperature range measured in degrees Celsius, whichever is greater.
- (c) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from OAM before such change may occur.

#### D.2.10 Monitoring

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- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (S-1, S-2, S-6, S-10, S-11, S-12, S-13, and C3) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### **Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

##### D.2.11 Record Keeping Requirements

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- (a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and the VOC and HAPs emission limits established in Condition D.2.1.
  - (1) The amount of VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The daily volume weighted VOC content of the coatings as applied on days when a coating with a VOC content greater than 85.5 pounds of VOC per gallon of solids is used;
  - (4) The cleanup solvent usage for each month;
  - (5) The total VOC usage for each month;
  - (6) The total HAPs usage for each month; and
  - (7) Monthly emissions in pounds of VOC and HAPs.
- (b) Continuous or intermittent readings of the minimum operating temperature shall be maintained to document compliance with Condition D.1.9.

## SECTION D.5

## FACILITY CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (j) One (1) HVLP chain on edge machine, designated as COE-5, with VOC emissions controlled by thermal oxidizer, CE-3, with the following equipment:
  - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour, which exhausts to one (1) stack designated as C3.
  - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour, which exhausts to one (1) stack designated as C3.
  - (3) One (1) electric heater which exhausts to one (1) stack designated as C3.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-7-10.5, WITH CONDITIONS LISTED BELOW.

### Construction Conditions

#### General Construction Conditions

- D.5.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### Effective Date of the Permit

- D.5.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

### Operation Conditions

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

##### D.5.3 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain a minimum overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating in pounds per gallon of solids delivered to the facilities listed above in Section D.5 (COE-5), the following facilities listed in Section D.1 (DC-2), and the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) shall be limited to 85.5. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

**D.5.4 New Source Toxics Control [326 IAC 2-1-3.4]**

The allowable HAP emissions shall be based on the Maximum Achievable Control Technology (MACT) analysis determined by the Office of Air Quality. The MACT for the facilities listed above in section D.5, shall be the use of the thermal oxidizer, CE-3, as described in Condition D.1.1(b), in combination with the use of HVLP application. The overall efficiency of this control device shall be 92.2%.

**D.5.5 PSD Modification [326 IAC 2-2] [40 CFR 52.21]**

Any change or modification which may increase the VOC PTE of COE-5 and DC-2, CE-3 (listed in Section D.1) to greater than 249 tons per year, shall require prior approval from the Office of Air Quality before such change may occur.

**D.5.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for COE-5 and any control devices.

**Compliance Determination Requirements**

**D.5.7 Testing Requirements [326 IAC 2-7-6(1),(6)]**

During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.5.3, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

**D.5.8 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Condition D.5.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.5.9 Recuperative Thermal Oxidizer Operations**

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.5.3 and D.5.4, when COE-5 is in operation.
- (b) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from OAM before such change may occur.

## **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.5.10 Record Keeping Requirements**

- (a) To document compliance with Conditions D.5.3 and D.5.4, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and the VOC and HAPs emission limits established in Conditions D.5.3 and D.5.4.
  - (1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The daily volume weighted VOC content of the coatings as applied on days when a coating with a VOC content greater than 85.5 pounds of VOC per gallon of solids is used;
  - (4) The cleanup solvent usage for each month;
  - (5) The total VOC usage for each month;
  - (6) The total HAPs usage for each month; and
  - (7) Monthly emissions in pounds of VOC and HAPs.
- (b) To document compliance with Condition D.5.3(b), records of the minimum operating temperature shall be maintained daily.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.5.11 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition D.5.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.6

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (k) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
- (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
  - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
  - (3) One (1) electric heater.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water, when using air dried or forced warm air dried coatings at temperatures up to ninety degrees Celsius (90EC), and extreme performance coatings designed for exposure to temperatures consistently above ninety-five degrees Celsius (95EC).
- (b) The thermal oxidizer shall be in operation at all times and maintain an overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating shall not exceed 85.5 pounds per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

#### D.6.2 New Source Toxics Control [326 IAC 2-4.1-1]

The use of the thermal oxidizer, CE-3, as described in Condition D.6.1(b), shall limit the potential to emit each individual HAP to less than ten (10) tons per year and the total HAPs to less than twenty-five (25) tons per year. Therefore, this facility is a minor source of HAPs, and the requirements of 326 IAC 2-4.1-1 are not applicable.

#### D.6.3 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the one (1) chain on edge machine (COE-6) shall not exceed the pound per hour emission rate established as E in the following formula:



Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control devices.

**Compliance Determination Requirements**

**D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.6.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

**D.6.6 Volatile Organic Compounds (VOC)**

Compliance with the VOC content limitation contained in Condition D.6.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

**D.6.7 Volatile Organic Compounds (VOC)**

Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition D.6.1. This volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U]$$

Where: A is the volume weighted average in pounds VOC per gallon  
C is the VOC content of the coating in pounds VOC per gallon  
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

**D.6.8 Recuperative Thermal Oxidizer**

- (a) The thermal oxidizer shall operate at all times that the process is in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1400EF during operation until a temperature and fan amperage has been determined from the most recent compliant stack test, as approved by IDEM. The temperature correlates to an overall VOC control efficiency of 92.2%. Once a temperature and duct pressure or fan amperage are determined during a compliance stack test, the operating temperature shall be greater than or equal to that temperature and the duct pressure or fan amperage shall be within a range established by the compliance stack test.
- (b) When operating the thermal oxidizer to achieve compliance with 326 IAC 8-2-9, 3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water, the thermal oxidizer shall maintain a minimum overall control efficiency of 92.2%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2).

**D.6.9 Particulate Matter (PM)**

The dry filters for PM control shall be in operation and control emissions from the chain on edge machine (COE-6) at all times when the chain on edge machine is in operation.

## **Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]**

### **D.6.10 Monitoring**

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (C3) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

### **D.6.11 Parametric Monitoring**

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the recuperative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be maintained at a minimum of 1400EF during operation until a temperature has been determined from the most recent compliance stack test, as approved by IDEM, OAQ. Once a temperature has been determined from the most recent compliance stack test, the temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test.
- (b) After the first compliance stack test, the duct pressure or fan amperage shall be observed at least once per week when the thermal oxidizer is in operation. This pressure or amperage shall be maintained within a range established in the most recent compliance stack test.
- (c) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the reading is outside the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

## **Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.6.12 Record Keeping Requirements**

- (a) To document compliance with Condition D.6.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.6.1.
  - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each month;
  - (4) The total VOC usage for each month;
  - (5) The weight of VOCs emitted for each compliance period;
  - (6) The continuous temperature records for the thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test; and
  - (7) After the first compliance stack test, weekly records of the duct pressure or fan amperage.
- (b) To document compliance with Conditions D.6.3 and D.6.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.